

IN THE CLAIMS:

1. (Currently amended) A method of coordinating magnetic resonance imaging (MRI) with operation of an implantable medical device (IMD), comprising;
sending a control signal to the IMD prior to delivery of electromagnetic radiation bursts to a patient in whom the IMD is implanted;
delivering electromagnetic radiation bursts to the patient ~~sensing electromagnetic radiation;~~ and
~~affirmatively blocking an input signal to~~ responsive to receipt of the control signal by the (IMD), blanking one or more components of an implantable medical device the (IMD) during for a time period beginning prior to and including delivery of the electromagnetic radiation bursts to ~~[[a]] the patient, wherein the one or more components comprises an automatic gain controlled amplifier.~~
2. (Cancelled)
3. (Currently amended) The method of claim 1, wherein sending the control signal comprises sending the ~~further comprising receiving a control signal from~~ an MRI device to cause the blanking.
4. (Currently amended) The method of claim 1, wherein sending the control signal comprises sending the ~~further comprising receiving a control signal from a~~ programmer to cause the blanking.
5. (Currently amended) The method of claim 1, ~~further comprising receiving a~~ wherein the control signal indicates ~~indicating~~ a timing for application of the ~~[[MRI]]~~ electromagnetic radiation bursts and blanking the components consistent with the timing.
6. (Cancelled)

7. (Currently amended) The method of claim 5, wherein the control signal ~~indicating the timing~~ comprises an indication of a start time of one or more of the electromagnetic radiation bursts.

8. (Currently amended) The method of claim 7, wherein the control signal ~~indicating the timing~~ comprises an indication of a duration of one or more of the electromagnetic radiation bursts.

9. (Currently amended) The method of claim 1, wherein blanking the one or more components of the IMD includes disabling one or more sensing components of the IMD for a period of time and re-enabling the one or more sensing components following the period of time.

10. (Currently amended) The method of claim 9, wherein blanking the one or more components of the IMD includes disabling one or more sensing amplifiers of the IMD for the period of time and enabling the one or more sensing amplifiers following the period of time.

11. (Currently amended) An implantable medical device (IMD) comprising:
a receiver to receive a control signal produced by a magnetic resonance imaging (MRI) system prior to application of an MRI electromagnetic radiation burst; and
a control unit that in response to the control signal, blanks affirmatively ~~blocks an input signal to one or more components of an implantable medical device~~ the (IMD) during for a time period beginning prior to and including application of an MRI electromagnetic radiation burst delivered by ~~said the~~ the MRI system ~~wherein the one or more components comprises an automatic gain controlled amplifier.~~

12. (Currently amended) The device of claim 11, wherein the control signal indicates a timing for application of one or more electromagnetic radiation bursts.

13. (Cancelled)

14. (Cancelled)

15. (Currently amended) The device of claim 14, wherein the control signal ~~received from the MRI device~~ comprises a signal used by the ~~MRI device~~ IMD to define blanking duration of the components of the ~~MRI device~~ IMD.

16. (Cancelled)

17. (Currently amended) The device of claim 11, wherein the control signal provides an indication of a start time of the MRI electromagnetic radiation burst.

18. (Currently amended) The device of claim 14, wherein the control signal provides an indication of a duration of the MRI electromagnetic radiation burst.

19. (Currently amended) The device of claim 11, wherein the control unit blanks the one or more components of the IMD by disabling one or more sensing components of the IMD for a period of time and enabling the one or more sensing components following the period of time.

20. (Currently amended) The device of claim 19, wherein the control unit blanks the one or more components of the IMD by disabling one or more sensing amplifiers of the IMD for the period of time and enabling the one or more sensing amplifiers following the period of time.

21. (Currently amended) The device of claim 11, wherein the ~~device~~ IMD is selected from the group consisting of:

an implantable cardiac pacemaker, an implantable defibrillator, an implantable cardioverter, an implantable pacemaker-defibrillator-cardioverter, an implantable sensing device; an implantable monitor; an implantable muscular stimulator; an implantable nerve stimulator; an implantable deep brain stimulator,

an implantable gastric stimulator, an implantable colon stimulator, an implantable agent dispenser, and an implantable recorder.

22. (Cancelled)

23. (Currently amended) A system comprising:

a magnetic resonance imaging (MRI) device including a transmitter to transmit a control signal relating to application of an MRI electromagnetic radiation burst from ~~said~~ the MRI device; and

an implantable medical device (IMD) including ~~a receiver to receive the signal; and~~ a control unit responsive to the control signal to ~~affirmatively block a signal to blank~~ one or more components of the IMD during for a time period beginning prior to and including application of the MRI electromagnetic radiation burst, ~~where in said one or more components comprises an automatic gain controlled amplifier operatively disposed within said IMD.~~

24. (Currently amended) The system of claim 23, wherein the receiver receives the control signal directly from the MRI device.

25. (Currently amended) The system of claim 23, further comprising a programmer, wherein the MRI device transmits the control signal to the programmer, and the receiver of the IMD receives the control signal from the programmer.

26. (Currently amended) The system of claim 23, wherein the control signal ~~received from the MRI device by the receiver~~ comprises a signal used by the MRI device IMD to define blanking of components of the ~~MRI device~~ IMD.

27. (Currently amended) The system of claim 23, wherein the control signal provides an indication of a start time of the MRI electromagnetic radiation burst.

28. (Currently amended) The system of claim 23, wherein the control signal provides an indication of a duration of the MRI electromagnetic radiation burst.

29. (Currently amended) The system of claim 23, wherein the control unit blanks the one or more components of the IMD by disabling one or more sensing components of the IMD for a period of time and ~~enabling~~ enables the one or more sensing components following the period of time.

30. (Currently amended) The system of claim 29, wherein the control unit blanks the one or more components of the IMD by disabling one or more sensing amplifiers of the IMD for a period of time and enabling the one or more sensing amplifiers following the period of time.

31. (Currently amended) A system comprising:

a programmer ~~to define a~~ defining timing for application of a magnetic resonance imaging (MRI) electromagnetic radiation burst and generating a first and second signals indicative thereof;

an MRI device ~~to receive a~~ responsive to the first signal ~~from the programmer and apply~~ applying the electromagnetic radiation burst according to the timing; and

an implantable medical device (IMD) to receive a second signal from the programmer and blank ~~affirmatively block a signal directed to~~ one or more components of the IMD during for a time period beginning prior to and including application of the MRI electromagnetic radiation burst, ~~wherein the one or more components comprises at least one automatic gain controlled amplifier disposed within said IMD.~~

32. (Original) The system of claim 31, wherein the first and second signals comprise an indication of a start time of the MRI electromagnetic radiation burst.

33. (Original) The system of claim 31, wherein the first and second signals comprise an indication of a duration of the MRI electromagnetic radiation burst.

34. (Cancelled)

35. (Cancelled)

36. (Cancelled)

37. (Cancelled)

38. (Cancelled)

39. (New) The system of claim 31, wherein the control unit blanks the one or more components of the IMD by disabling one or more sensing components of the IMD for a period of time and enabling the one or more sensing components following the period of time.

40. (New) The device of claim 31, wherein the control unit blanks the one or more components of the IMD by disabling one or more sensing amplifiers of the IMD for the period of time and enabling the one or more sensing amplifiers following the period of time.

41. (New) The device of claim 11, wherein the IMD is selected from the group consisting of:

an implantable cardiac pacemaker, an implantable defibrillator, an implantable cardioverter, an implantable pacemaker-defibrillator-cardioverter, an implantable sensing device; an implantable monitor; an implantable muscular stimulator; an implantable nerve stimulator; an implantable deep brain stimulator, an implantable gastric stimulator, an implantable colon stimulator, an implantable agent dispenser, and an implantable recorder.